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Field Artillery Fire Support for Counterinsurgency Operations:

Combat Power or Counterproductive?

by

Major Edward E. Hoffer

Field Artillery

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School of Advanced Military Studies  
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# ABSTRACT

FIELD ARTILLERY FIRE SUPPORT FOR COUNTERINSURGENCY OPERATIONS: COMBAT POWER OR COUNTERPRODUCTIVE? By Major Edward E. Hoffer, USA, 48 pages.

This monograph attempts to answer the following question: Should field artillery be used as a counterinsurgency weapon?

The monograph first defines the terms insurgency, counterinsurgency, and artillery fire support, and explains the three phases of an insurgency as conceptualized by Mao Zedong (Mao Tse-Tung) and General Vo-Nguyen Giap. Second, the study reviews the United States Army's historical reliance upon artillery fire support. Third, in order to reveal the effectiveness of artillery fire support, it examines two counterinsurgency battles—one with and one without artillery fire support.

Finally, the monograph relates the advantages and disadvantages of field artillery fire support. It concludes that, although field artillery may be a combat power detractor when used against a phase one and two insurgency, it is a necessary combat power multiplier against a phase three insurgency. Ways of expanding field artillery's effectiveness as a counterinsurgency weapon are detailed.

## TABLE OF CONTENTS

	Page
INTRODUCTION . . . . .	1
I. U.S. Historical Reliance Upon Artillery Fire Support . . . . .	4
II. Artillery Fire Support: Two Counterinsurgency Battles . . . . .	11
III. Analysis of Artillery Fire Support as a Counterinsurgency Weapon . . . . .	23
IV. Discussion . . . . .	33
CONCLUSION . . . . .	38
ENDNOTES . . . . .	41
BIBLIOGRAPHY . . . . .	46

## INTRODUCTION

The purpose of this monograph is to examine and to answer the following question: Should field artillery be used as a counterinsurgency weapon? The answer to this question has a direct impact upon how we should organize, equip, and train all forces used in counterinsurgency operations.

Beginning with the Kennedy administration's national strategy of "Flexible Response", a debate has existed as to the proper role of field artillery in counterinsurgency warfare. Flexible Response emphasized the necessity of creating forces capable of meeting threats to United States security at any level of conflict.<sup>1</sup> Since then, opinions have ranged from those who believe that field artillery fire support can provide an important weapon for defeating an insurgency to those who would exclude it from counterinsurgency operations. The United States Army's failure in Vietnam has tended to discredit those who support the massive use of firepower, and, by association, the use of field artillery in counterinsurgency warfare.<sup>2</sup>

Present counterinsurgency doctrine and the organizational structure of units earmarked for counterinsurgency warfare reflect the opinion of those who believe field artillery to be of limited utility, or, indeed, counter-productive.<sup>3</sup> However, questions about the use of field artillery in counterinsurgency operations still remain largely unexamined. Are the "fire power lessons of Vietnam" really correct? Is the rejection of field artillery as a counterinsurgency weapon warranted? The success or failure of our counterinsurgency efforts, present and future, may depend upon the correct

answers. In order to answer these questions, we should examine what is meant by the terms insurgency, counterinsurgency, and artillery fire support.

There is considerable disagreement in the literature and in military circles regarding what is meant by the term "insurgency". Adding to the confusion is the fact that a variety of terms are used interchangeably. Rebellion, revolt, revolution, peasant war, guerrilla war, and people's war are all used to describe an insurgency. The key thought behind all these terms is that they describe efforts by a group of people which represent a fundamental challenge to an existing political order and to those holding power. At the heart of such a challenge is the attempt to gain control of the governing structure. The United States Army recognizes this fact, as is evidenced by its definition of insurgency:

Insurgency is an attempt by an organized group to overthrow a constituted government through subversion and armed conflict. The motivations of the organized group can be many and varied, but almost certainly their goals include seizure of power.<sup>4</sup>

Although all wars are political in nature, insurgency wars are unique in that they are centered on the political-social system as the main objective, rather than on the armed forces.<sup>5</sup> To better understand the complexities of an insurgency, it is helpful to follow the model developed by Mao Zedong and refined by General Vo- Nguyen Giap. Both saw contemporary insurgency as a political and social struggle composed of three phases: first, insurgent agitation and proselytization among the masses--the phase of contention; second, overt violence, guerrilla operations, and the establishment of bases--the guerrilla phase; and third, open conventional and guerrilla-directed warfare aimed at government forces designed to topple the existing political structure--the mobile warfare phase.<sup>6</sup>



Current Army thinking on insurgency warfare has difficulty in differentiating these phases of an insurgency. Presently, efforts by the United States to assist a government in resisting an insurgency fall under the concept of "low-intensity conflict", or "conflict short of war." These terms are used to describe conflict involving a "limited political and military struggle to achieve political, social, economic, or psychological goals."<sup>7</sup> It is important to remember that a "limited political and military struggle" may be "limited" only from the viewpoint of the United States. From the viewpoints of the insurgent and the threatened government, the political and military struggle may be total. Therefore, counterinsurgency efforts require the expenditure of superior means over an extended period of time.

Throughout this monograph, the term "counterinsurgency" will refer specifically to efforts by the United States to support a nation's efforts to combat an active insurgency. This support includes advisory assistance, equipment, and, when approved by the national command authority, the use of U.S. combat forces. It is at this point that the possibility of using artillery fire support to help defeat an insurgency may be considered. To do so, it is necessary to understand what is meant by the term "artillery fire support."

Fire support is the collective and coordinated use of target acquisition assets, indirect fire weapons, armed aircraft, and other lethal and nonlethal means to support military operations.<sup>8</sup> Within the fire support system many weapons are available to attack targets. Under U.S. Army doctrine, these include: mortars, cannons, rockets, missiles, tactical aircraft, and naval gunfire weapons. All these weapons contribute

to the Army's ability to generate firepower. The purpose of firepower is to suppress the enemy's fires, to neutralize his tactical forces, and to destroy his ability to fight.<sup>9</sup> Throughout 20th Century warfare, the greatest battlefield producer of firepower has been the field artillery. From World War II to the present, the U.S. Army has increasingly relied upon field artillery firepower to defeat its enemies on the battlefield.<sup>10</sup>

It was the Army's reliance upon artillery firepower during the Vietnam War that critics have seriously challenged. To understand how the Army used artillery in Vietnam, and to examine the thoughts of those critical of its employment, we shall trace the use of field artillery during the two wars preceding the involvement of the United States in Vietnam.

#### I. U.S. Historical Reliance Upon Artillery Fire Support

In every theater of the Second World War, the United States Army grew to rely increasingly upon field artillery to destroy its battlefield enemy. Using the mass fire techniques developed under the direction of General Summerall during the 1920's, American artillery surpassed all rival arms for destroying enemy personnel and equipment. U.S. Army artillery, with its ability to concentrate sustained massed concentrations of fire power day and night irrespective of weather conditions, was credited time and again with breaking up and destroying German counterattacks during the Battle of the Bulge.<sup>11</sup>

Using its new mechanized mobility, artillery moved forward with supported forces to provide heavy firepower throughout offensive and

defensive operations. In the Mediterranean, European and Pacific Theaters, artillery fires were used increasingly to destroy and to disorganize enemy defenses, as well as to contain and to break up enemy counterattacks. The rise of air power and the tank notwithstanding, artillery came to constitute more and more of the total combat force.<sup>12</sup>

The developing reliance upon artillery that took place in the war in the Pacific demonstrates the Army's increasing demand for artillery fire support. At the beginning of the American offensive in the Pacific, the United States Army believed that field artillery would be of little use in helping to defeat the Imperial Japanese Army. General MacArthur's staff, in particular, felt that artillery would be ineffective in the jungles.<sup>13</sup> This belief was enforced by MacArthur's air commander, General George C. Kenney, who assured everyone that "the artillery in this theater flies."<sup>14</sup>

The Army quickly learned by bitter experience that fighting Japanese forces without appropriate artillery fire support was costly and often led to defeat.<sup>15</sup> By the end of the war, artillery fire support had become the dominant supporter of maneuver forces. Because of the restrictive terrain which hindered armored forces and the limited capability of air support, particularly during night and bad weather, the artillery became the firepower solution to Japanese strong point and infiltration tactics. This lesson would be retained by the Army and would emerge again twenty years later in Vietnam.

An outstanding example of the Army reliance upon field artillery fire support by the end of the war was the 7th Infantry Division's battle for Kwajalein Island. On 1 February 1944, the 184th and 32nd Regimental Combat teams of the U.S. 7th Infantry Division conducted an amphibious

assault on the southern beaches of Kwajalein. Lead battalions of both teams reached the beach experiencing only light opposition. Moving inland, they ran immediately into effective defensive fires. For the next six days, the 7th Infantry Division fought from one end of the island to the other yard by yard. The direct and general support fires from five artillery battalions located nearby on Carlson Island provided unrelenting firepower support. An examination conducted to determine the cause of enemy deaths found that 70 percent of the enemy who died above ground had been killed by army field artillery or mortars.<sup>16</sup>

The field artillery fire support during the attack on Kwajalein Island was a model of fire support coordination. Close to 65,000, 105mm and 155mm rounds were fired. This equated to one shell impact for every 50 square meters of island.<sup>17</sup> Throughout the clearing operations the 7th Infantry Division Artillery fired most of its missions within 200 meters of friendly troops. Kwajalein Island was one of a series of artillery intensive operations that occurred during the remainder of the war in the Pacific.<sup>18</sup>

In essence, what evolved during the course of World War II was this: commanders realized that high volumes of firepower minimized casualties. They learned by harsh experience to substitute material costs at every available opportunity to avoid payment in blood. The commitment to fighting battles with increased firepower in order to save the lives of American military personnel was not only compatible with democratic concern for the individual, but it was also viewed as an effective and successful technique for defeating the enemy. This "American Way of War" was further expanded during the Korean conflict by applying massive firepower to defeat

an enemy which often used guerrilla and infiltration tactics in a limited war setting.

The United States Army found the North Korean and Chinese battlefield tactics hard to counter. These tactics were the products of years of guerrilla warfare against the Japanese. Small unit tactics were built around the idea that units would infiltrate through enemy formations by locating and moving around enemy strong points and penetrating enemy weak points. The United States Army, conditioned by its European experience, found it difficult to adjust to the enemy's nonlinear warfare.<sup>19</sup>

In an attempt to redress the superiority that the North Korean and Chinese forces had in fighting strength and to deal with the problems of nonlinear battle, the Army concentrated on maximizing the use of its artillery fire support assets. Using the fire coordination techniques of the Second World War, the Army was able to mass its artillery and batter Chinese attacks against the United Nations line.<sup>20</sup>

It is not an oversimplification to say that the field artillery came to dominate the Korean War. General Van Fleet, the Eighth Army Commander, insisted that the Chinese intervention be smothered by artillery fire. He stated, "I want so many artillery holes that a man can step from one to another."<sup>21</sup> General Van Fleet ordered an increase in the rate of artillery fire five times as great as the previous amount.<sup>22</sup> Expenditures of artillery ammunition approached phenomenal rates. During the Battle of Soyang from 17 to 23 May 1951, twenty-one battalions supporting X Corps fired a total of 309,958 rounds. From 10 May to 7 June, when the Chinese Offensive was brought to a halt, ammunition expenditures exceeded 644,000 rounds.<sup>23</sup>

When the Chinese offensive was halted and truce negotiations began, the war entered a new phase. Both sides dug deep into the hills that they occupied. A network of trenches and strongly fortified positions reminiscent of World War I appeared. The Chinese People's Liberation Army and the United Nations Forces resorted to prolonged and violent artillery engagements in an attempt to counter the growing strength of each other's defensive positions. By 1953 the Chinese had brought up even more guns than the United States. Only superior American fire coordination allowed the Eighth Army to enjoy artillery dominance throughout the remainder of the war.<sup>24</sup>

The defensive artillery support during the battle for Pork Chop Hill is symbolic of artillery preeminence at the close of the war. Throughout the battle seven 105mm and two 155mm howitzer battalions, under the tactical direction of one Fire Direction Center, fired continuously for 48 hours. During the first 24 hours, the guns fired 37,655 rounds in defense of the general outpost line. By the second day, the attack on three of the outposts had been destroyed and only Pork Chop Hill itself remained threatened. By the end of the battle the supporting artillery had fired 77,439 rounds, of which 26,142 rounds were 155mm.<sup>25</sup> With this type of reliance upon artillery fire support, it is easy to understand why the number of total rounds expended during the Korean War exceeded that of World War II.<sup>26</sup>

The experience of both the Korean War and the Second World War established a belief within the Army that artillery fire support was a principal means of destroying enemy battlefield forces. Its massive use in the Pacific during World War II and during the Korean War showed that

artillery was effective in restrictive terrain, and that it could engage and destroy forces using infiltration and "guerrilla" tactics.

Dominant in the minds of most officers remained the belief that artillery could help substitute material cost for human cost on the battlefield. It was this powerful institutional perception of the war experiences of the preceding twenty years that would establish how field artillery would be used in Vietnam.

Most of the Army's leadership viewed with skepticism efforts by the Kennedy administration to examine the military challenges of wars of national liberation, as well as to review how conventional forces could engage in counterinsurgency missions. Attempts to redefine the role of conventional forces in counterinsurgency warfare met strong resistance from the Army's leadership. The Army rejected suggestions that it decrease its reliance upon heavy armor and mechanized units, massed firepower, and high technology in favor of light infantry units. It felt that the threat of insurgent forces--or as it was then termed "irregular forces"--could be handled by its present structure and tactics. Counterinsurgency, so far as it was examined at all, was considered a variation of the regular combat mission of standard army units. The Army prescribed no changes in organization, nor any reduction of the firepower to be used in fighting an insurgency.<sup>27</sup>

The Army continued to emphasize the incorporation of artillery firepower into what was believed to be counterinsurgency tactics. Units were told, for instance, that in "this technique (the 'fireflush'), the blocking or ambush forces encircle an area approximately 1,000 meters square and await the enemy to exit the area as he is subjected to intense saturation type indirect fire and/or attack by tactical air support."<sup>28</sup>

The perceived importance of carefully controlled artillery fire in counterinsurgency missions was stressed throughout this period. Instructors advocated unobserved and observer-directed fire missions in "guerrilla war" as well as in conventional conflicts. Artillery support down to company level was recommended. In short, the conventional war doctrine for artillery employment transferred almost in whole into the counterinsurgency environment.<sup>29</sup>

Influenced by the experience of its last two wars and proceeding on the belief that insurgence could be destroyed by conventional tactics and heavy firepower, the Army entered the Vietnam War prepared to maximize the use of artillery fire support. In the seven years that Army combat units fought to defeat the Viet Cong and the North Vietnamese, the field artillery fire support effort would exceed that of both World War II and Korea combined.<sup>30</sup> But, unlike the last two wars, the United States did not emerge victorious. Both during and after the war, critics challenged the Army's use of field artillery fire support. Detractors stated that reliance on artillery fire support was completely inappropriate for combating an insurgency.

Much of the criticism directed at the U.S. Army's use of artillery fire support was based upon the British Army's experience of defeating an insurgency in Malaya.<sup>31</sup> This success is significant because it remains a model for many who believe that insurgencies can be countered by applying the lessons learned from the Malayan Emergency. To understand the success of the British effort and to contrast that with the United States Army's experience in Vietnam, we will examine two representative battles to see how artillery fire support was or was not applied in each case.



## II. Artillery Fire Support: Two Counterinsurgency Battles

Malaya: The Malayan Emergency, or the "Anti-Bandit campaign" as it was initially called, commenced on 16 June 1948, and lasted until 31 July 1960. At its height, 45,000 British and Malayan soldiers fought the Malayan Peoples' Liberation Army (MPLA) throughout the length of the Malayan peninsula. When the Emergency officially ended, government forces had lost 2,384 killed and over 2,400 wounded. Of those killed 519 were British and Commonwealth troops. Communist losses were placed at 6,705 killed, with 1,286 wounded and 2,696 surrendered.<sup>32</sup>

The Malayan Communist Party (MCP) was primarily a Chinese organization. Created in the 1920's, its armed component had been active against Japanese occupation during World War II. The party leader, Chen Peng, and his military deputy, Lau Yen, were allegedly students of Mao Zedong.

An examination of MCP documents captured early in the insurgency reveals Chen's operational plan. The insurgency was to consist of three distinct phases: the crippling of the British planters and tin miners through harassment and intimidation while increasing guerrilla strength through the capture of arms and equipment from police posts; the ejection of government security forces from the countryside and villages, forcing them to retreat to the main roads, strategic points, and urban centers; and the establishment of "liberated areas" in insurgent-controlled territory which would then expand until they encompassed all Malaya.<sup>33</sup>

The basic requirements of the guerrillas were security, intelligence, rice, weapons, and ammunition. The jungle provided security; the

caches of weapons from the Second World War yielded weapons and ammunition; and Chinese "squatter" communities supplied rice and intelligence.

The British successfully ended the Emergency by focusing on the squatters. They were the key to solving the problem. The Chinese rural communities had a short history dating from shortly before World War II. The squatters had no legal title to their land, and they had not been incorporated into the local Malay governments. Owing to the lack of administrative control of their remote geographic location, squatter settlements were highly susceptible to guerrilla influence and easily coerced to provide food, shelter, and intelligence. To counter this source of support, the British undertook a massive relocation effort. The new settlements would be on equally suitable land with public services and educational facilities provided. An important factor within the public service was law enforcement and security installations intended to help develop a "proper respect for law and order."<sup>34</sup>

A comprehensive counterinsurgency plan was initiated under the direction of Lt. General Sir Harold Briggs, who held the authority to direct both civil and administrative military security forces.<sup>35</sup> Known as the Briggs Plan, it was based upon the establishment of a military area of responsibility along the jungle edge. This protected populated areas and lines of communication against guerrilla intimidation. At the same time, military forces constituted a barrier blocking the guerrillas from the source of their supplies and from the MCP cells. The police forces dominated the populated areas, suppressed communist organizations, and provided local security. Through British Police's Special Branch sources and methods, they gained combat information and intelligence from a population growing more

cooperative under the new sense of security.

By nurturing a sense of government presence and security from guerrilla forces within the Chinese rural population, General Briggs was working on a correct appreciation of the situation: the MPLA had been employing greater amounts of terrorism in order to compel "proper" attitudes on the part of uncommitted or irresolute members of the Chinese community.<sup>36</sup>

The key to providing the Chinese communities with security was an efficient system of command and control which tightly integrated civil, police, and military commands at federal, state, and district levels. All military operations reflected careful coordination between military and civilian authorities. The use of military forces in coordination with civilian security forces was a hallmark of British operations.

A representative example of a British military counterinsurgency effort is Operation Achilles Heel which occurred in South Selangor, Malaya, early in 1952. South Selangor is a large rubber plantation area. For three years, the Suffolk Regiment of the British Army had been conducting counterinsurgency operations with slow but measured success. Throughout 1952 the Regiment concentrated on eliminating the 4th Independent Company of the MPLA under the Command of Liew Kim Bok.

In January of 1952, district security police received information which identified the location of a squad of Min Yuen. This was the name given to soldiers of the MPLA responsible for acquiring and transporting supplies. According to Security Police sources of information, seven Min Yuen were camped in an old cemetery bordering the main Broga Setal road. The cemetery was on a hillside rising above the road, and it was overgrown with lallang (elephant grass) from three to five feet high. On the other three

sides, the cemetery was surrounded by a rubber plantation. The undergrowth between the trees had not been cleared for years, and was fairly thick. Opposite the cemetery, and across the road, was dense jungle. A path ran at right angles from the road through the rubber trees to a Kongsì (Chinese communal hut) and then farther on until it met a stream running parallel to the road.<sup>37</sup>

A successful operation would result in destroying the 4th Independent Company's supply lines at Broga severely crippling their ability to continue military operations in the area. Success could only be achieved if the cemetery could be totally surrounded. To achieve this, the operation plan called for one infantry company augmented with security police to conduct an unobserved four-hour approach march through the rubber plantation. They would then take up blocking positions along the stream and path bordering the cemetery. Another infantry company would be transported on the road and quickly take up attack positions along the northern border of the cemetery. The Suffolks recognized that the Min Yuen would try to escape by crossing the road and retreating into the jungle in an attempt to rejoin their unit. To close off this final escape route, an armored car platoon would patrol the road and the security police, with an infantry platoon, would occupy positions paralleling the road. Surprise would be the key element necessary for success. To achieve surprise, it would be necessary for three separate elements to converge simultaneously on the cemetery from different directions. Once the blocking positions in the rubber plantation and along the path leading to the Kongsì were established, the assault company would be transported in civilian trucks immediately followed by the armored car platoon. The attack was set for 1600 hours.<sup>38</sup>

At 1600 hours the assault company, hidden inside civilian trucks, stopped in position on the road at the northeastern corner of the cemetery. The company deployed in squad formation and began to move up the hill through the rubber trees bordering the cemetery. Almost immediately they were engaged by enemy rifle fire coming from the cemetery. The assault company continued up the hillside while the armored cars used their twin Vickers machine guns to suppress the enemy fire. Once the assault company was in position along the northern flank of the cemetery, it attacked on line with each man only one yard apart from the next. Even this close together, the line became separated in places by the tall elephant grass. Three fire fights developed at ranges of three to five yards. The armored cars continued to use their machine guns to engage Min Yuen attempting to move away from the assault company. The initial assault had killed two Min Yuen and had driven another into the blocking elements along the footpath where he also was killed.<sup>39</sup>

After the completion of the assault, the battalion commander reorganized the company and ordered a second sweep of the cemetery--this time with the assault company reinforced so that it could cover the ground lined up shoulder to shoulder. During the second sweep, two more Min Yuen were located. One was killed and the other taken prisoner.

The operation had involved a total of 250 infantrymen along with 50 security police. Air and artillery fire support were totally absent. The largest weapons used were the twin Vickers machine guns mounted on the armored cars. British forces suffered one severe casualty from a shotgun blast. Min Yuen losses were five killed and two captured--marking the operation as one of the most successful undertaken by the Regiment.<sup>40</sup>

This operation illustrates several important points that held true throughout the majority of British counterinsurgency operations during the Malayan Emergency. The British military mission was essentially constabulary in nature. Large, multi-battalion operations were abandoned early in the Emergency. For the most part, British soldiers were employed to aid the civil administration; they acted as an extension of police security operations outside of populated areas. After 1949, typical military operations were small unit patrols and ambushes, cordon and search operations, and direct support of the police in tasks such as food and resource denial, road blocks, and body or vehicle searches. British soldiers also assisted directly in the implementation of civil affairs policies, most importantly those involving the resettlement of the squatters.<sup>41</sup>

In the original words of Sir Gerald Templer, High Commissioner and Supreme Commander from 1952 to 1954, the government's main objective was that of winning "the hearts and minds of the Malay as a people."<sup>42</sup> Some firepower implications of this objective should be noted. The use of artillery and air fire support was sharply restricted. Both were felt to be dangerous threats to the lives and livelihoods of the local population. In an effort to win the population's "hearts and minds" British authorities rigorously attempted to avoid damage to local crops, livestock, and structures. Tactical air support was limited to occasional air strikes carried out by propeller-driven fighter-bombers. These airstrikes were conducted in unpopulated areas under rules of engagement that required positive visual identification of targets and clearance by civilian authorities.<sup>43</sup> Artillery fire support was so minimal as to be almost nonexistent. Routine fire support missions were virtually unheard of. What, in effect, took place was the conversion

artillery units into infantry.<sup>44</sup> The principle of minimum force governed all military actions. The American effort in Vietnam would be sharply different.

Vietnam: By January of 1967, the United States Army had been in South Vietnam for seventeen years. Since 1950, the Army's efforts had been directed at providing military assistance--initially to the French and later to the South Vietnamese--in an attempt to arrest the Communist Vietnamese insurgents' objective of unification with North Vietnam. Throughout the Truman and Eisenhower administrations, the number of Army observers and advisers grew to over three hundred. With the Kennedy administration came a rapid rise in the level of the insurgency which was met by steady increases in American troop strength totaling over sixteen thousand by 1964.

The communist insurgency continued to gain strength no matter how much material and advisory assistance the South Vietnamese government received. In June of 1965, General William C. Westmoreland, Commander, United States Military Assistance Command, Vietnam (MACV), saw no alternative but to commit large numbers of United States combat forces. As the situation continued to deteriorate, President Johnson came to believe that only U.S. combat troops could prevent the collapse of South Vietnam.<sup>45</sup>

With the deployment of American combat units to South Vietnam, the Army applied the doctrine it had developed from the experiences of World War II and Korea. The Army, confronted with limitations that prohibited a decisive battle of annihilation through an offensive ground war against North Vietnam, found the attrition strategy of the Korean War to be an example of how to achieve success in Vietnam. This strategy, with its reliance on firepower, material, and technology, was applied in Vietnam for the remainder

of the American involvement.

The Army's strategy emphasized American war-fighting strengths of material abundance and technological superiority, while coping with the nation's profound abhorrence of U.S. casualties. Mass application of firepower as in Korea and World War II was believed to be the most effective and efficient way of generating enemy casualties while minimizing U.S. casualties. The Army conducted large search-and-destroy operations in an effort to "fix, find, and finish" the enemy. "When guerrillas were located, the infantry took cover while massive firepower support attempted to destroy the insurgents."<sup>46</sup> As General Depuy noted, if "you just wanted to analyze what happened in Vietnam, you'd say the infantry found the enemy and the artillery and the air killed the enemy."<sup>47</sup> When General Westmoreland was asked at a press conference what the answer to insurgency was, his reply was one word: "Firepower."<sup>48</sup> As in World War II and Korea, artillery was the Army's primary firepower weapon. How artillery fire support was applied in Vietnam and what were its effects can be appreciated by examining the Battle of Prek Klok.

Of the hundreds of engagements that took place between the United States Army and the Viet Cong and North Vietnamese forces, Prek Klok was neither the largest nor the most successful. It was, however, representative of many battles which took place during large unit search and destroy operations conducted at the height of the American combat role in Vietnam from 1966 to 1969.

The Battle of Prek Klok occurred during Operation Junction City from 22 February to 14 May 1967. Committed to Junction City were the 1st and 25th Infantry Divisions along with five separate brigades: the 173d Airborne; the



196th Light Infantry; the 199th Light Infantry; 3d Brigade, 4th Division; and 1st Brigade, 9th Division, along with the 11th Armored Cavalry Regiment.<sup>49</sup> Operation Junction City was conducted in the area known as War Zone C, centered in northern Tay Ninh Province. This area had long been a major Viet Cong sanctuary and was believed to be the headquarters for the Central Office of South Vietnam (COSVN). COSVN was the controlling headquarters for all Viet Cong activities in South Vietnam. Intelligence had identified the 9th Viet Cong division as being the COSVN security force whose movement into the western area of War Zone C had been monitored since December of 1966. Additionally, the 271st and 272nd Viet Cong Regiments were located within War Zone C, near Lo Go on South Vietnam's Cambodian border.<sup>50</sup>

As part of the 3rd Brigade, 1st Infantry Division, the 1st Battalion, 16th Infantry became a part of Operation Junction City on D+1 (23 February) when it was airlifted from its base camp at Lai Khe to Suoi Da. There it assumed the mission of 3rd Brigade reserve. On 24 February the battalion established positions along Route 4 north of Suoi Da, six kilometers south of an artillery fire support base at Prek Klok. The mission given to the 1st of the 16th was to secure the road in its assigned sector and to engage in search and destroy operations. For the next three days the battalion proceeded with its mission.<sup>51</sup>

At 0800 on 28 February, Company B of the 1st Battalion, 16th Infantry, under the command of Captain Donald S. Ulm, departed the battalion's night defensive position located off of Route 4 and moved east on a search and destroy mission. Their destination was the stream named Prek Klok located approximately twenty-five hundred meters to their front. B Company advanced in two columns in echelon with the 3rd Platoon leading

followed by the 2nd and 1st Platoons. At 1052 hours the point element of the 3rd Platoon began to receive small arms and automatic weapons fire from its front. The enemy force was initially reported as two squads; but, as the enemy fire increased in volume, Captain Ulm revised his assessment of enemy strength upward. Within minutes, B Company found itself pinned down by three enemy machine guns. The enemy was well concealed, and was occupying hastily dug positions.<sup>52</sup> The 3rd Platoon, still the most forward company element, continued to receive steady fire and was unable to gain fire superiority. Ten minutes after contact, the platoon began to receive fire on its right (south) flank as well as from its front to the east.<sup>53</sup>

Following 1st Division policy, B Company had been adjusting artillery fire along its route of march. The 2nd Battalion 33rd Artillery (105mm), located at Artillery Base II at Prek Klok, was responsible for providing direct support artillery fires for B Company. Upon contact the accompanying artillery forward observer called for a shift of fires to the enemy's position. Within minutes a command and control helicopter was over the engagement area and in touch with the division tactical operations center. The tactical operations center was alerted to get a forward air controller airborne over the area and to be prepared to direct air strikes into the area.<sup>54</sup>

Captain Ulm marked the position of his unit on the ground by using colored smoke and gave the disposition of his company with respect to the smoke. The airborne observer could now distinguish the company's location and shifted supporting artillery fire onto the enemy position. Joining the artillery fire in support of B Company were the 155mm howitzers at Artillery Fire Base I.

At 1110 hours, twenty minutes after initial contact, the enemy launched an attack from the northeast. Contact between the 3rd Platoon and the company commander was lost. Captain Ulm realized that the 3rd Platoon, and possibly the 2nd Platoon, would be flanked from the direction of the attack. He ordered the 1st Platoon to move to the left flank of the 3rd Platoon. As the 1st Platoon moved into position, the entire company was hit by small arms fire, rifle grenades, B40 rockets, and 60mm and 82mm mortar rounds. At 1230, radio contact was reestablished with the 3rd Platoon. Captain Ulm learned that the company was in an arc-shaped formation with the 3rd Platoon now in the center, the 2nd on the right, and the 1st on the left (north). From this information, the airborne observer was able to adjust the artillery fires to within 100 meters of the company position.<sup>55</sup>

Captain Ulm discovered that much of the automatic weapons and small arms fire was coming from the trees, and that the fire was extremely accurate. He directed his company's efforts at the expertly camouflaged snipers in the trees.<sup>56</sup>

At approximately 1300, the 2nd platoon detected movement to the west, and it appeared that the enemy was attempting to envelope the company and to attack the open (west) end of their perimeter. Artillery was called in on the western side of the company to meet this threat. For the next 50 minutes continuous artillery fire fell on the enemy, thus protecting the company on three sides. Tactical air strikes also began to provide fire support which prevented the enemy from reinforcing their attacking units. Between 1300 and 1400, the artillery was adjusted on six occasions to within fifty meters of the company position. By 1500 enemy fire had ceased, and contact was broken.<sup>57</sup>

A sweep of the area by a relieving company revealed 167 enemy dead and 40 enemy weapons captured or destroyed. A prisoner captured in the battle area identified himself as the assistant commander of a company in the 2nd Battalion, 101st North Vietnamese Army Regiment of the 9th Viet Cong Division. It was this battalion which had attacked Company B and had been shattered.<sup>58</sup>

The Battle of Prek Klok was a costly victory for the men of B company. Twenty-five men were dead and another 28 severely wounded. Without artillery fire support, the cost would have been much higher. How much higher is conjecture, but the possibility of defeat and possible annihilation were very real to the men of B company 1st of the 16th Infantry. The morning after the fight, Brigadier General Bernard Rogers walked among the survivors and asked one soldier, "What did you think of the artillery and the air strikes--were they coming in a little close?" The soldier smiled and replied: "Sir, I was getting sprayed all over. But, God, it felt good!"<sup>59</sup>

Three field artillery battalions provided fire support during the battle of Prek Klok, and a total of seventeen artillery battalions supported Operation Junction City. As in the Second World War and Korea, the Army relied on artillery fire support to destroy enemy formations that had been fixed by maneuver forces. During Operation Junction City, artillery fire was quickly recognized by Viet Cong and North Vietnamese commanders as the greatest threat to their ability to conduct military operations against South Vietnamese and U.S. forces. To counter the U.S. fire support strength, the Viet Cong and North Vietnamese conducted three direct attacks against fire support bases established during the operation--all ended in failure with devastating casualties.<sup>60</sup>

One of these attacks became the most significant combat action of the operation. The 272nd Viet Cong Regiment was destroyed when it attempted to over-run Fire Support Base Gold occupied by the 2nd Battalion, 22nd Infantry and the 2nd Battalion, 77th Field Artillery, commanded by Lieutenant Colonel John W. Vessey, Jr. Engaging the enemy with over 1,000 rounds in direct fire and coordinating supporting fires from two other battalions together with Air Force tactical air support, the forces occupying Fire Support Base Gold killed 635 Viet Cong. U.S. losses were 31 killed and 109 wounded.<sup>61</sup>

### III. Analysis of Artillery Fire Support as a Counterinsurgency Weapon

Both Operation Achilles Heel and the Battle of Prek Klok point out strengths associated with field artillery used against an insurgency. Operation Achilles Heel demonstrates that, in the absence of artillery fire support, British forces found it necessary to use overwhelming manpower against the Malayan Insurgency. In Operation Achilles Heel British forces outnumbered Min Yuen 40 to 1. If we apply this same ratio to the battle of Prek Klok, nearly 12,000 infantrymen would have been required to engage the 300 insurgents. Artillery fire support allowed U.S. forces at Prek Klok to destroy the enemy with a combat ratio of close to 1:1.

Artillery fire support for forces engaged in battle with insurgents is a combat power multiplier. As in Operation Junction City and the Battle of Prek Klok, the conduct of a search for an insurgent presents the enemy with the opportunity to ambush American counterinsurgency forces. The enemy usually fires the first shots of an engagement and, as in ambushes, it is usually the first shots which are the most effective. Only gradually would

an ambushed unit such as B Company 1st Battalion 16th Infantry at Prek Klok be able to organize its return fire, during which time the ambushers would be able to bring down a prepared barrage from well-sited weapons.

Both the Viet Cong and the NVA had good fire discipline and were practiced in firing volleys at a given signal. At the start of a firefight it was often they, rather than the U.S. forces, who had the upper hand.<sup>62</sup> It was not uncommon to hear of actions in which "the North Vietnamese had numerical and fire superiority. Initially, it was they who freely employed supporting fires including 60, 82, and 120mm mortars together with recoilless rifles."<sup>63</sup> Engaged U.S. forces had to build up a base of fire piece by piece if they were to hold their own. As in the battle of Prek Klok, the platoons would first reply with their M16 rifles and M79 grenade launchers; then, in a few minutes, they would augment these fires with M60 machine guns. With these weapons, the U.S. forces enjoyed little superiority over their NVA or Viet Cong counterparts.<sup>64</sup>

The next U.S. firepower elements to come into action would be the supporting mortars and artillery. The effects of these fire support weapons would allow U.S. forces to gain fire superiority. Viet Cong and NVA soldiers dug excellent prepared and hasty positions which only artillery could engage effectively. Attempts by enemy forces to move to an exposed flank were continually checked by artillery fires. In an effort to escape artillery fire power, Viet Cong and NVA forces would hug close to U.S. forces. This created a situation in which U.S. reinforcements could approach the enemy from his flank and rear to take up blocking positions. This often left Viet Cong and NVA units in a dilemma. They could break contact and withdraw through artillery fire, or they could attempt to move through U.S. forces.

The disadvantages of these two options are clear. To remain would allow U.S. forces time to adjust artillery as close as fifty meters from their position, thus eliminating the benefits of hugging U.S. positions. Carefully coordinated artillery support together with aggressive maneuver allowed smaller U.S. forces to find and then to punish larger Viet Cong and NVA units.<sup>65</sup> By halting enemy movement, artillery fire support prevented outnumbered U.S. forces from being overwhelmed and allowed U.S. reinforcements time to arrive and to deploy against the enemy.

Artillery also provided another important service in counterinsurgency operations by helping to build and defend fire support bases throughout Vietnam. Fire support bases were jointly occupied by supporting artillery and defending infantry. From its fire base, an artillery unit could shoot in any direction to its maximum range and would answer calls for fire support from maneuver forces operating under its protective umbrella.<sup>66</sup> Fire support bases were also positioned so that other fire support bases were within range allowing for mutual artillery fire support in defense of each other. Fire support bases allowed Allied forces to patrol the surrounding area actively and continually and to return after an operation to refit and rest in the security of the base. Their permanence helped to deny the enemy control of the area. Aggressive infantry maneuver and artillery fire support from fire support bases was often the first step towards gaining government control and providing security to the local population.

Viet Cong and NVA unit commanders recognized the threat that fire support bases posed to their continued control of an area. For this reason, fire support bases were repeatedly objects of determined enemy attacks.

These were continued throughout the war even though not one fire support base was ever destroyed. These attacks often pitted one or two infantry companies and an artillery battery against a full Viet Cong or NVA regiment.<sup>67</sup>

Repeatedly, the attackers were driven away, leaving their dead by the hundreds scattered around the firebase. The fire support bases and the artillery units that defended them were a direct threat to Viet Cong and NVA control not only because of their firepower, but also because of their ability to support civic action in the area.

Field artillery units located on fire support bases throughout Vietnam supported the government's pacification program through a variety of civic action programs. Projects that had an immediate impact included food and clothing distribution, and medical, dental, and veterinary assistance. Long-term projects included construction and support of schools, markets, hospitals, and orphanages.<sup>68</sup> These efforts to "help the people help themselves" were often the first steps in establishing the idea that there existed another alternative to Viet Cong or NVA domination.

A final advantageous consideration about the use of field artillery needs to be covered. As a fire support system, field artillery is extremely rugged and requires little maintenance support. When compared to other fire support systems such as the Army attack helicopter and Air Force tactical aircraft, field artillery is an austere system requiring none of the vast base facilities and technical maintenance support personnel needed to service the equipment. In Vietnam both attack helicopters and Air Force tactical aircraft needed from 4 to 7 hours of service maintenance for every flying hour. In comparison, field artillery maintenance failure rates and service requirements were only a fraction of that of fixed-wing and rotor-wing



aircraft.<sup>69</sup>

Considering these advantages and the artillery fire support successes that occurred in Operation Junction City and which continued throughout the war, how could artillery fire support be viewed as a counterproductive counterinsurgency weapon?

One serious disadvantage in the use of field artillery is the associated cost in manpower. Counterinsurgency is an infantryman's war. British efforts to establish population control and security from the MPLA, and American efforts to search for and destroy Viet Cong and North Vietnamese Army (NVA) units, demanded the commitment of as many infantrymen as possible to these missions. Among the three British Army field artillery regiments employed in Malaya, two were used as security forces augmenting the Malayan constabulary while the third, the 26th Regiment, was converted into combat infantrymen.<sup>70</sup> In contrast, United States Army artillery units in Vietnam fully retained their fire support mission. Field artillerymen represented over thirty percent of the Army's combat strength. Of the fifty-three combat battalions taking part in Operation Junction City, seventeen were field artillery.<sup>71</sup> At the height of American involvement in Vietnam, field artillery forces equaled the combat infantry strength of nearly three infantry divisions. This represents a significant investment of manpower that many believe could have been better used if replaced by infantry units.

Adding to the manpower costs of field artillery fire support is the associated logistical burden created by field artillery employment. Of the 543,000 men that the United States had in Vietnam in 1968, only 80,000 were actually combat soldiers. The remainder were engaged in supply and service tasks. Over half of this effort was dedicated to supporting the logistical

demands created by the U.S. forces' reliance upon firepower--artillery firepower in particular.<sup>72</sup>

One can appreciate the logistic demand created by ammunition consumption by reviewing the number of artillery rounds fired in support of ground operations. The daily average volume of field artillery fire during 1967 and 1968 prior to the Tet offensive as recorded by the 1st Infantry Division was 2,376 rounds of 105mm, 925 rounds of 155mm, 200 rounds of 203mm, and 1,100 rounds of 4.2-inch.<sup>73</sup> In the battle of Prek Klok, 1417 rounds in four hours were fired in support of B Company, 1st Battalion, 16th Infantry. For Operation Junction City, the Army used over 366,000 rounds of artillery.<sup>74</sup> The net effect of such ammunition expenditures created a monumental logistical support demand. The quantity of ammunition moved to Vietnam averaged slightly under 40,000 tons per month in 1966, rose to 75,000 tons per month in 1967, and increased to around 90,000 tons per month in 1968. Demand reached a peak in February and March of 1968 at over 100,000 tons.<sup>75</sup>

The manpower necessary to receive, transport, store, and distribute the rounds to firing units was significant. For every howitzer crewman that entered Vietnam, four servicemen were needed to support him.<sup>76</sup> Port facilities had to be constructed that could handle deep draft ammunition ships. Roads had to be built or upgraded and then maintained in order to support the high tonnage transport of ammunition. Vast ammunition supply depots such as those at Long Binh, Qui Nhon, and Cam Ranh Bay needed to be constructed and operated. Engineer, Quartermaster, Ordnance, and Transportation Corps units were stretched to the limit to meet the logistical demand that artillery fire support created.<sup>77</sup>

The necessity to secure the ammunition supply depots and transfer points aggravated the manpower demands created by artillery fire support. These were highly vulnerable to enemy action. Repeated enemy attempts to destroy them made it necessary to assign combat units to protect these depots and transfer points. Using ammunition personnel as security forces proved ineffective for two reasons. First, "it detracted from the efficiency in ammunition operations."<sup>78</sup> Second, "the security of such critical installations required a professionally trained and operated security force."<sup>79</sup>

The logistic manpower demand of field artillery was one of several key contributors that helped create a situation wherein American and Allied combat strength or "foxhole strength" composed only one-sixth of the total force present. This explains how, even at the height of American intervention, there only existed a ratio of 1.2 Allied combat soldiers to every one NVA soldier.<sup>80</sup>

The British decision not to rely upon artillery fire support in Malaya avoided the associated manpower demands. However, this was not Britain's fundamental reason for rejecting the use of field artillery in Malaya. It was the British view that the development of trust and cooperation between the civilian and military authorities and the population had to be achieved. This was particularly important if information about the insurgents' location and movements was to be forthcoming. British officers felt that if information resulted in the use of artillery firepower, then such information soon would not be provided. Artillery firepower would destroy the people's means of livelihood. Rubber trees, irrigation systems, dikes, livestock, and cultivations were all threatened by artillery fire. Of greater concern was the lasting negative effect caused by the death or injury

of an innocent woman or child.<sup>81</sup> The British believed that villages where British troops came under MLPA attack were not responsible for harboring insurgents, but that the inhabitants had been coerced or intimidated into cooperation. The use of artillery fire support against the insurgents would only insure that any village so attacked would never again cooperate with the government. This explains why, in Operation Achilles Heel, the heaviest weapon used was the armored car machine gun.

In Vietnam, the United States Army attempted to protect the population through relocation and by observing restrictive Rules of Engagement (ROE). But with the Army's traditional reliance upon massive firepower, it was impossible to avoid civilian casualties and damage to property, livestock, and crops. This was especially the case with the use of Harassment and Interdiction (H&I) fire. Supposedly based upon intelligence concerning the movement of enemy troops and supplies, H&I missions were conducted routinely with no particular purpose in mind other than to be a nuisance to the enemy. Brigadier General Douglas Kinnard, Commanding General of II Field Force Artillery, identified H&I fire as the most expensive and least effective technique of employing artillery fire.<sup>82</sup> Further, the civilian damage and casualties H&I fires produced alienated a good portion of the civilian population.<sup>83</sup> Lieutenant General Frank T. Mildren, Deputy Commanding General of United States Army Vietnam, contended that "purely H&I fires in a Vietnam environment have little, if any, value while doing practically no damage to the enemy."<sup>84</sup> However, with the exception of the Tet Offensive, H&I fires represented a majority of field artillery fire missions.<sup>85</sup>

One explanation for the continued use of H&I fires was that, in the absence of sufficient hard intelligence on the results of their fires,

artillery commanders were often evaluated on fire missions produced and number of rounds expended.<sup>86</sup> These incentives were reflected in the statement of one battery commander:

We had a real trucking problem in hauling that ammo to our firing batteries. But the ammo kept coming whether or not we had targets for it, so the batteries fired their allotments every opportunity they had, whether there was actually anything to shoot at or not.<sup>87</sup>

The availability of artillery firepower and remote sensors and radar made it easier to fire an artillery mission at suspected enemy activity rather than to send an infantry patrol out to identify the activity. This was particularly true at night and in bad weather. But, as one artillery commander instructing new forward observers stated, "No matter how good your sensors were, or how rigorous your efforts to restrict civilians from the target area, you could not make a distinction between friend and foe."<sup>88</sup> This was especially true in the case of refugees who were not familiar with the area and who often traveled at night.

Unfortunately, artillery fire support not only caused civilian casualties but also was a significant cause of U.S. casualties. This was a result of several circumstances. One often overlooked problem associated with the extensive use of artillery is the resulting unexploded artillery ordnance produced by duds. The dud rate of artillery ordnance was roughly 2 percent of all rounds fired. The Viet Cong and NVA were extremely resourceful in using these rounds as booby traps and mines against Allied forces.<sup>89</sup> Although there is no way to accurately estimate how many casualties were produced by dud artillery rounds alone, it is a certainty that artillery rounds were responsible for a significant number of U.S. soldiers who died as a result of wounds inflicted by such devices. During

the first six months of 1967, 17 percent of all U.S. casualties were caused by mines and booby traps.<sup>90</sup> In addition to these new by-products of artillery fire support was the ancient problem of artillery amicide.

The nonlinear nature of counterinsurgency warfare increased the incidence of field artillery amicide. Also contributing to such occurrences were the affects of dense jungles and mountainous terrain. The standard use of close support of night defensive positions by heavy artillery concentrations fired from distant fire support bases and the night and day operation of small units on rough terrain made cases of misplaced artillery fire inevitable.<sup>91</sup> In many cases of artillery amicide, the cause was an error by a forward observer either in plotting his position or in shifting artillery fires to the target.<sup>92</sup> This type of error occurs in every conflict. However, the lack of front lines in a counterinsurgency war increases the problem for the forward observer.

Manpower costs, negative impact on the host nation, and amicide are all significant detractors from the use of artillery fire support in an insurgency.

We have now traced why and how the United States Army came to use artillery in Vietnam; and we have examined two counterinsurgency battles, one with and one without artillery fire support. Recognizing the major strengths and weakness of using artillery fire support in a counterinsurgency, can we answer the question: Should field artillery be used as a counterinsurgency weapon?

#### IV. Discussion

Can both the detractors and supporters of artillery fire support be correct? Most supporters as well as detractors refuse to admit the complexity of the question and are often guilty of oversimplification in presenting their case. The majority of detractors place their emphasis on the "war in the villages". They cite the Malayan Emergency as an example of how to successfully defeat an insurgency without artillery fire support. By denying the insurgent access to the population, the insurgency is weakened because it is cut off from manpower, supplies, and intelligence. Lacking food and manpower, the insurgent will become isolated and forced to fight to regain control over the population. At this time, superior counterinsurgency military forces can identify and destroy him. This separation of the insurgent from the people involves intensive use of large internal security and civilian police forces. This approach to counterinsurgency has little use for field artillery fire support because of its "indiscriminate effects". What supporters of the Malayan counterinsurgency example often fail to mention, however, is that much of the success of separating civilian from insurgents was greatly assisted by the fact that the insurgency was confined to the Chinese residents of Malaya. The Chinese were a distinct minority of the population who were easily separated from the ethnic Malays. Also, the British were not faced with any significant amount of external assistance to the insurgents.<sup>93</sup> The MPLA's standard heavy weapons were captured British Bren guns. Faced with these limitations, the MPLA only rarely conducted military operations with anything greater than a platoon-sized unit. This allowed British and Malay forces to operate

without artillery fire support. They did not need a firepower advantage and therefore avoided the disadvantages associated with the use of artillery. The British could mass 250 infantrymen and 50 policemen to confront seven insurgents as they did in Operation Achilles Heel. Achieving combat ratios of 40 to 1 was a luxury denied U.S. forces in Vietnam.

From 1965 on, North Vietnamese introduction of forces kept pace with the United States' introduction of forces. If British forces in Operation Achilles Heel had faced an insurgent force the size that existed in the Battle of Prek Klok, the consequences for them would have been tragic. Light infantrymen and policemen do not do well under heavy machine gun fire and mortar attack without commensurate fire support. At no time during the Malayan Emergency did British troops have to face a well-trained and heavily equipped battalion-sized enemy unit. By way of comparison, Operation Junction City produced enemy casualties that equaled half the total MPLA casualties for the entire 9-year Emergency period.<sup>94</sup>

Although American and South Vietnamese forces were also fighting an insurgency, it was remarkably different from what the British faced in Malaya. As already noted, the representative Battle of Prek Klok was of an intensity unheard of in Malaya. There did exist the "village war" in which the Viet Cong, like the MPLA in Malaya, concentrated on gaining the support, or at least the obedience, of the people. But along with the "village war" there also existed a mainforce war that approached conventional proportions.

This war was fought by up to regimental-sized units which received significant external support. They were highly trained and equipped with heavy weapons. The mainforce war depended far less upon the dynamics of political subversion than upon the traditional principles of war. It was



this war on which the United States Army chose to concentrate. This decision was based upon the result of military operations conducted by the Viet Cong from November of 1964 to June of 1965. During this period, the Viet Cong mounted several limited offensives using regimental-sized units which defeated smaller South Vietnamese units engaged in pacification operations. By the time U.S. combat forces were introduced, the South Vietnamese were losing a battalion-sized force every week.<sup>95</sup>

It was felt that if U.S. forces were dispersed in an attempt to win the "village war" they would suffer defeat in detail as had the South Vietnamese units. Accordingly, the Army sought to find the Viet Cong and NVA mainforce units and to destroy them. Otherwise, they would destroy any attempt by our forces to win the "village war". The tactical concept was to concentrate U.S. forces for large-unit battles in the uninhabited border and enemy sanctuary area, while the South Vietnamese forces looked after the internal security of their own people.<sup>96</sup>

The rationale behind this tactic was to provide a shield of U.S. forces between the Viet Cong in the coastal villages and the NVA infiltrating through Laos and Cambodia. This shield would provide the time necessary for the South Vietnamese pacification effort in the villages. To achieve this result against a mainforce insurgent, artillery fire support is a necessary combat power multiplier. Under these circumstances, its advantages outweigh its disadvantages.

The experiences of both the British and the Americans in counterinsurgency warfare point out the necessity of examining an insurgency to determine what phase it is in. By using the phases conceptualized and practiced by Mao Zedong and General Giap, a determination can be made if

field artillery fire support should or should not be used.

In the first phase when insurgent agitation and proselytization among the population takes place, and in the second phase when overt violence and small-unit guerrilla operations and bases are established, field artillery fire support, with its associated disadvantages, is counterproductive. During the Malayan Emergency, the Malayan Communist Party achieved only the initial stages of Phase Two. The British choice of relying upon light infantry and civil police to concentrate on population control was correct. The disadvantages of artillery--its manpower requirements, logistical requirements, and negative effect on a host nation's population and resources--were all greater than any possible military benefits it could achieve.

This is not the case, however, in an insurgency that has entered its third phase: open warfare between insurgent and government forces designed to topple the existing political structure by military force. Both Mao Zedong and General Giap recognized that insurgent warfare could not exist alone against a determined opponent. Giap wrote that "guerrilla war must multiply. To keep itself in life and develop, guerrilla warfare has necessarily to evolve into mobile warfare. This is a general law."<sup>97</sup>

Mobile warfare, as a phase three development, insures that counterinsurgency forces cannot disperse throughout the countryside into small units capable of destroying phase one and two gains. Mao wrote of the conventional mainforce units and phase two guerrilla units as "a man's right arm and left arm."<sup>98</sup>

Against a phase three insurgence, field artillery fire support becomes a potent counterinsurgency weapon. Its demonstrated firepower when

correctly applied allows counterinsurgency efforts to attack the mobile units of phase three as well as guerrilla units operating in the later stages of phase two. With the fire support of artillery, counterinsurgency forces can engage mainforce and guerrilla units and prevent them from attacking the counterinsurgency effort directed at eliminating insurgent control of the population.

The advantages of field artillery fire support--firepower, security, and austerity--allow a smaller force than otherwise would be necessary to "fix, find, and finish" conventional mobile and guerrilla units. The substitution of artillery fire support for battlefield strengths allows more force to engage in the critical village war. In a phase three insurgency, phase one and two activities continue to occur at an accelerated pace, and all three phases must be countered simultaneously.

The British in Malaya did not face the difficulties of fighting an insurgency in its third phase. In contrast, the United States Army in Vietnam was challenged by a Phase Three insurgency which threatened the survival of South Vietnam. Using large-unit operations, supported by artillery and air fire, the U.S. Army destroyed the Viet Cong and NVA mainforce units by 1969. However, the phase one and two insurgency remained; and, with the American withdrawal of forces, was eventually rebuilt to a phase three military organization.

## CONCLUSION

When used as a counterinsurgency weapon, field artillery can be a combat power multiplier; but, when used in inappropriate circumstances, it can also be counterproductive. By using the phases of an insurgency as established by Mao Zedong and General Giap, we can better determine when field artillery fire support is appropriate.

In the Malayan Emergency, the British experience demonstrates that artillery is both unnecessary and counterproductive in a phase one and initial phase two insurgency. In contrast, the phase two and three insurgency that the United States challenged in Vietnam demonstrates the necessity and usefulness of artillery fire support. Both the Malaya and the Vietnam conflicts provide us with lessons on how to increase the utility of field artillery fire support when it is used against a phase two or three insurgency.

The United States Army must alter its traditional reliance on field artillery fire support when battling an insurgency. Artillery fire support should only be used against an observed enemy. Commanders must abandon the practice of firing harassment and interdiction missions, thus eliminating the following disadvantages associated with artillery use: First, ammunition consumption would be cut by 60 to 70 percent. Second, unnecessary damage to the host nation, and danger to the population would be greatly limited. Third, logistical and manpower requirements would be decreased.

Artillery units designated for counterinsurgency warfare must be trained and equipped to conduct decentralized support missions. This is

required to meet demand for fire support over large areas where maneuver units are conducting counterinsurgency operations. Artillery batteries must prepare for split battery operation over extended periods of time. This places a tremendous demand on training personnel to conduct all battery fire support operations with only one half the men and equipment.

The fire support base concept should be expanded and not thought of as a defensive outpost; rather, it should be incorporated as part of an offensive effort directed against destroying insurgent control of the population found in the fire support base area of responsibility. Artillery personnel, therefore, must be capable of defending the base against attack. To be truly effective, they must be well-versed in infantry tactics to include patrolling. This will free up needed infantry units and allow them to increase their pressure on the insurgency.

Artillery fire support elements must also vigorously pursue local civic action programs. Civic action should not be viewed as an additional responsibility, but as one equal to the fire support mission.

Lessons learned in regard to material requirements for effective artillery fire support against an insurgency fortunately coincide with conventional war requirements. Artillery weapons of lighter weight and increased range are required to improve area coverage and mobility. The United States Army should continue efforts to improve the lethality of artillery ammunition. Improved counter-mortar radar, electronic sensors, and target designators can all enhance artillery fire support. Technology should be directed at providing fire support teams with lightweight position location devices so that their exact location can always be known. This will reduce artillery amicide and allow quicker response time to requests

for fires. Reliable, lightweight battery fire direction computer systems should be developed to assist split battery fire direction centers in exercising tactical and technical fire direction.

Present training, doctrine, and force design ignore many of these fire support counterinsurgency lessons. Present recommendations to eliminate the M198, 155mm general support battery from the Light Infantry Division should be resisted. The organic 105mm artillery found in the direct support battalion remains an excellent suppression weapon, but it does not have the necessary destructive effect of the heavier 155mm round against prepared positions. Light Infantry Division Artillery, and particularly the Field Artillery Brigades designated to support them, must be trained and equipped to conduct long duration decentralized split battery operations. Decentralization will cause controlling field artillery headquarters to need increased communications capability for command and control. For artillery to be an effective counterinsurgency weapon, present and future field artillery officers and noncommissioned officers must receive instruction on counterinsurgency fire support operations. Our present narrow focus on the Central European battlefield, with its demand for massive centralized fire support, does not prepare artillerymen for the Army's most likely future conflict.

Finally, senior artillerymen must also learn to determine when artillery fire support is no longer effective, and they must be prepared to recommend that the artillery fire support be reduced and withdrawn. In destroying an insurgency, knowing when artillery is not appropriate is as important as knowing when it is.

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